



State of Utah

Department of  
Environmental Quality

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*Executive Director*

DIVISION OF AIR QUALITY  
Cheryl Heying  
*Director*

JON M. HUNTSMAN, JR.  
*Governor*

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*Lieutenant Governor*

DAQE-IN0141400001-08

August 18, 2008

Greg Jones  
Three Rivers Gathering LLC  
1050 17<sup>th</sup> Street, Suite 500  
Denver, Colorado 80265

Dear Mr. Jones:

Re: Intent to Approve: New Three River Compressor Station, Duchesne County – CDS B; ATT;  
NSPS; Title V Minor  
Project Code: N014140-0001

The attached document is the Intent to Approve for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any questions you may have on this project to Mr. Tad Anderson. He may be reached at (801) 536-4456.

Sincerely,

Ty L. Howard, Manager  
New Source Review Section

TLH:TA:kw

cc: Tri-County Health Department

**STATE OF UTAH**

**Department of Environmental Quality**

**Division of Air Quality**

**INTENT TO APPROVE: New Three  
Rivers Compressor Station**

**Prepared By: Tad Andreson, Engineer  
(801) 536-4456  
Email: tdanderson@utah.gov**

**INTENT TO APPROVE NUMBER**

**DAQE-IN0141400001-08**

**Date: August 18, 2008**

**Three Rivers Gathering LLC**

**Source Contact  
Greg Jones  
(303) 672-6980**

**M. Cheryl Heying  
Executive Secretary  
Utah Air Quality Board**

### ***Abstract***

***Three Rivers Gathering LLC has requested to install and operate the new Three Rivers Natural Gas Compressor Station (NGCS). The Three Rivers NGCS consists of a natural gas operated compressor engine, condensate tank and an internal combustion generator engine. The emissions from the new Three Rivers NGCS are as follows: 57.74 Tons Per Year (TPY) of NO<sub>x</sub>, 69.95 TPY of CO, 36.13 TPY of VOC, and 4.12 TPY of combined HAP's.***

***Duchesne County is an attainment area of the National Ambient Air Quality Standards (NAAQS) for all pollutants. New Source Performance Standards (NSPS) Subpart JJJJ—Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines regulations apply to this source. Title V of the 1990 Clean Air Act applies to this source as a minor area source.***

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notice of intent to approve will be published in the Vernal Express on August 20, 2008. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and make comment. If anyone so requests a public hearing, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated.

The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

#### **General Conditions:**

1. This AO applies to the following company:

##### **Site Office**

Three Rivers Gathering LLC  
Remote location, Nine Mile Canyon  
South of Myton, Utah

Phone Number

Fax Number

##### **Corporate Office Location**

Three Rivers Gathering LLC  
1050 17<sup>th</sup> Street, Suite 500  
Denver, Colorado 80202

(303)672-6900

(303)294-9632

The equipment listed in this AO shall be operated at the following location:

##### **Street Address & UTM's**

Northeast of Price, Utah

From Myton, Utah travel west on Hwy 40 for 1½ miles, turn south on 6000 west / Sand

Wash Road. Travel south on 6000 West / Sand Wash Road for 1¾ miles; turn southwest onto 9450 South/Nine Mile Road. Travel south on 9450 South / Nine Mile Road for 25 miles; turn East on to Sand Wash Road and travel 4 miles to the Mainline 40 right-of-way. Turn South onto the Mainline 40 right-of-way and travel South 4/5ths of a mile to the compressor station site which is on the east side of the right-of-way.

Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD27  
2,900.00 kilometers Northing, 781.49 kilometers Easting, Zone 12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401.
5. All records referenced in this AO or in applicable NSPS and/or NESHAP and/or MACT standards, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request. Records shall be kept for the following minimum periods:
  - A. All other records                      five years
6. Three Rivers Gathering LLC (Three Rivers) shall install and operate the Three Rivers NGCS and shall conduct its operations in accordance with the terms and conditions of this AO, which was written pursuant to Three Rivers Notice of Intent submitted to the Division of Air Quality (DAQ) on April 30, 2008 and additional information submitted to the DAQ on June 2, 2008 and July 16, 2008.
7. The approved installations shall consist of the following equipment or equivalent\*:
  - A. One (1) Natural Gas Compressor
 

Manufacturer:	Caterpillar
Model:	G3616 TALE
Horsepower:	4,735
Horsepower(site rated):	4,000
Controls:	Oxidation Catalyst
  - B. One (1) Condensate Storage Tank
 

Size:	16,800 gallons
Throughput:	214,620 gallons per year

## C. One (1) Generator engine

Horsepower: 189

\* Equivalency shall be determined by the Executive Secretary.

8. Three Rivers shall notify the Executive Secretary in writing when the installation of the equipment listed in Condition #7 has been completed and is operational. To insure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If the construction and/or installation has not been completed within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-18.

**Limitations and Test Procedures**

9. Emissions to the atmosphere at all times from the indicated emission point(s) shall not exceed the following rates and concentrations:

**Source: Natural Gas Compressor**

<u>Pollutant</u>	<u>lb/hr</u>	<u>grams/bhp-hr</u>
NO <sub>x</sub> .....	8.81 .....	1.0
CO .....	8.81 .....	1.0

10. Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below:

<u>Emissions Point</u>	<u>Pollutant</u>	<u>Testing Status</u>	<u>Test Frequency</u>
Compressor Engine	NO <sub>x</sub> .....	** .....	@
	CO .....	** .....	@

B. Testing Status

\*\* Initial compliance testing is required. The initial test date shall be performed as soon as possible and in no case later than 180 days after the start up of a new emission source, an existing source without an AO, or the granting of an AO to an existing emission source that has not had an initial compliance test performed. If an existing source is modified, a compliance test is required on the modified emission point that has an emission rate limit.

@ Compliance test at least once every five years or perform annual portable analyzer testing, subsequent to the initial compliance test. The Executive Secretary may require testing at any time.

C. Notification

The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary.

The source test protocol shall be approved by the Executive Secretary prior to performing the tests. The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held, if directed by the Executive Secretary.

D. Sample Location

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

E. Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2 or other testing methods approved by the Executive Secretary.

F. Nitrogen Oxides (NO<sub>x</sub>)

40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, 7E, or other testing methods approved by the Executive Secretary.

G. Carbon Monoxide (CO)

40 CFR 60, Appendix A, Method 10, or other testing methods approved by the Executive Secretary.

H. Calculations

To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary, to give the results in the specified units of the emission limitation.

I. New Source Operation

For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the production rate listed in this AO. If the maximum AO allowable production rate has not been achieved at the time of the test, the following procedure shall be followed:

- 1) Testing shall be at no less than 90% of the production rate achieved to date.

- 2) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
- 3) The owner/operator shall request a higher production rate when necessary. Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum AO production rate is achieved.

J. Existing Source Operation

For an existing source/emission point, the production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

K. Internal Combustion Engines and Natural Fired Gas Boilers

Portable testing monitors may be used to test natural gas fired boilers and IC engines. If portable monitors are to be used an EPA test method must be performed at least once every five years. This applies to sources that do not have a federal testing requirement listed in an NSPS, NESHAP, MACT or other federal standards.

11. Visible emissions from the natural gas operated compressor shall not exceed 10% opacity. Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.

**Fuels**

12. Three Rivers shall use pipeline quality natural gas in the compressor and generator.

**Federal Limitations and Requirements**

13. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18 and Subpart JJJJ, 40 CFR 60.4230 to 60.4248 (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines) and 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Source Categories Subparts A and ZZZZ, 40 CFR 63.6580 to 63.6675 (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines) apply to this installation.

**Records & Miscellaneous**

14. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on the information available to the Executive Secretary which may include,

but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on the equipment authorized by this AO shall be recorded.

15. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.
16. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

Under R307-150-1, the Executive Secretary may require a source to submit an emission inventory for any full or partial year on reasonable notice.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:

<http://www.airquality.utah.gov/>

The annual emissions estimations below include point source only and does not include fugitive emissions, fugitive dust, road dust, tail pipe emissions, grandfathered emissions etc. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, Maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for the Three Rivers NGCS are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	NO <sub>x</sub> .....	57.74
B.	CO .....	69.95
C.	VOC .....	36.13
D.	HAPs	
	Formaldehyde .....	2.11
	Acetaldehyde .....	1.04
	Acrolein .....	0.64
	Methanol .....	0.33
	Total HAPs .....	4.12



DAQ is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final AO.

Sincerely,

Ty L. Howard, Manager  
New Source Review Section